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REMARKS

Claims 1, 2, 4, 6-11, 13-18, and 20-24 are pending in the present application after this amendment cancels claims 3 and 12 and adds new claims 20-24. Claims 1 and 15 have been amended to include the features of canceled claim 3 and/or to further clarify the subject matter recited therein. No new matter is added by the amendments, which find support throughout the specification and figures. In particular, the new claims find support at least in the specification at page 28, line 15 to page 29, line 15. In view of the amendments and the following remarks, favorable reconsideration of this application is respectfully requested.

Claims 1, 2, and 10 stand rejected under 35 U.S.C. §103(a) as being unpatentable over United States Patent No. 6,211,937 to Miyachi et al. (hereinafter Miyachi) in view of 6,281,960 to Kishimoto et al. (hereinafter Kishimoto). Applicants respectfully traverse.

The addition of the feature of claim 3 to claim 1 obviates this rejection, and therefore claim 1 is discussed in the context of the rejection of claim 3.

Claims 14-18 (claims 3 and 12 having been canceled) stand rejected under 35 U.S.C. §103(a) as being unpatentable over Miyachi in view of Kishimoto, and further in view of United States Patent No. 6,288,766 to Mashiko et al. (hereinafter Mashiko). Applicants respectfully traverse.

The Examiner admits that Miyachi does not disclose the feature of claim 3 (now canceled and incorporated in claim 1) of a reservoir (Office Action; page 4, line 17), and also does not allege that Kishimoto discloses this feature. (Office Action; page 4, lines 18 et seq.). However, the Examiner asserts that Mashiko discloses the feature of a reservoir, and states that it would have been obvious to combine the references "to inject the liquid crystal material into the cell in a short time without deforming or damaging the cell while eliminating an occurrence of

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unwanted deficient injection of the liquid crystal, bubbles and cavitation." (Office Action; page 5, lines 11-13; citing Mashiko; col. 3, lines 43-47).

However, this conclusory reasoning is insufficient to support a claim of obviousness. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either *explicitly or implicitly in the references themselves or in the knowledge generally available* to one of ordinary skill in the art. (MPEP 2143.01, emphasis added). "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000).

The Federal Circuit addressed the standard for obviousness and the requirement of motivation in Teleflex, Inc. et al. v. KSR Int'l Co., (119 Fed. Appx. 282; 2005 U.S. App. LEXIS 176). The patent at issue in *Teleflex*, related to an electronic pedal position control and a pedal assembly. In *Teleflex*, the district court granted a motion for summary judgment based on invalidity due to obviousness. The Federal Circuit vacated the decision and remanded to the lower court for further proceedings on the issue of obviousness. The Federal Circuit stated that, in regard to obviousness, "a person of ordinary skill in the art must not only have had some motivation to combine the prior art teachings, *but some motivation to combine the prior art teachings in the particular manner claimed.*" (*Teleflex*, citing *In re Kotzab*; emphasis added). The Federal Circuit found that that there was no motivation to combine the Asano patent, which disclosed all of the limitations except the electronic control, and the Rixon patent, which disclosed an electronic control and an adjustable pedal assembly. As the court further stated:

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[t]he district court correctly noted that the nature of the problem to be solved may, under appropriate circumstances, provide a suggestion or motivation to combine prior art references. However, *the test requires that the nature of the problem to be solved be such that it would have led a person of ordinary skill in the art to combine the prior art teachings in the particular manner claimed.*

(*Teleflex*, citing as background *Rouffei*, 149 F.3d at 1357; emphasis added).

It is respectfully submitted that the present rejection is similar to the rejection discussed in *Teleflex* in that there is no motivation provided in Mashiko to combine its teaching with either of Miyachi or Kishimoto. Mashiko apparently discusses fabrication of a liquid crystal device. However, there is no motivation in Mashiko to suggest a combination with the liquid crystal devices discussed in Miyachi or Kishimoto. As the *Teleflex* court held, there must be *specific teaching* to motivate a person of ordinary skill in the art must to combine the prior art teachings *in the particular manner claimed*. Therefore, since there is no motivation to combine the references, the rejection is improper.

The Examiner uses an alleged advantage of Mashiko, injecting liquid crystal, as a motivation to combine the teaching of Mashiko with Miyachi or Kishimoto, without showing that Miyachi or Kishimoto furthers this goal. A general statement of improvement, by for instance cost-savings or increased efficiency, does not translate into a motivation to combine references. Miyachi or Kishimoto relate to liquid crystal devices after fabrication. However, there is no indication that Miyachi or Kishimoto would benefit from a reservoir used in fabrication. Mashiko does not provide any motivation for a skilled practitioner in the art to look to Miyachi or Kishimoto to combine the references.

Additionally and significantly, none of the cited references discloses all of the features of amended claim 1. Claim 1 relates to a liquid crystal display panel that includes, *inter alia*, a pair

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of substrate structures having plural pixels where an image is produced and liquid crystal filling a gap between the pair of the substrate structures and selectively making the pixels dark and bright for producing the image. The liquid crystal display panel of claim 1 also includes column spacers formed on one of the substrate structures of the pair and held in contact with the other of the substrate structures. The liquid crystal display panel of amended claim 1 also includes *a reservoir formed between said substrate structures for preventing said pair of substrate structures from increasing said gap by accumulating part of said liquid crystal.*

As mentioned above, the Examiner does not allege that Miyachi or Kishimoto disclose the feature of claim 3 now incorporated in claim 1. The Examiner asserts that Mashiko discloses this feature at element 63 of figure 13 and at column 1, lines 26-38. However, as is apparent from the cited section, element 62 is used during the fabrication of the liquid crystal device, and is not a part of the device. Element 62 is used to inject liquid crystal material during fabrication, and is not adapted to accept liquid crystal material from between the substrates to relieve pressure, as described in the specification. (Specification; page 28, line 15 to page 29, line 15). In the present invention, the reservoir accepts part of the liquid crystal in response to poking by a user's finger or due to temperature fluctuations. Therefore, element 62 of the Mashiko does not disclose a reservoir as recited in amended claim 1.

Additionally, element 62 of Mashiko is not arranged between the substrate structures, and therefore does not anticipate the recited feature of claim 1 in which the reservoir is formed between the substrate structures. Therefore, for at least this additional reason, claim 1 is allowable.

Since none of the cited references disclose or suggest a reservoir as recited in claim 1, the combination of the references, the appropriateness of which is respectfully not conceded,

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does not render the present invention unpatentable. Therefore, the rejection of claim 1 should be withdrawn.

Claims 2, 10, 11, and 14 depend from claim 1 and are therefore allowable for at least the same reasons as claim 1 is allowable.

Independent claim 15 also provides that the assembled substrate structure provides a reservoir between the substrate structures for preventing the pair of substrate structures from increasing the gap by accumulating part of the liquid crystal. Therefore, claim 15 is allowable for at least the same reasons as claim 1 is allowable as discussed above.

Claims 16-18 depend from claim 15 and are therefore are allowable for at least the same reasons as claim 15 is allowable.

Claims 4 and 13 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Miyachi in view of Kishimoto and Mashiko, and further in view of United States Patent No. 6,010,384 to Nishino et al. (hereinafter Nishino). Applicants respectfully traverse.

The addition of Nishino fails to cure the critical deficiency discussed above in regard to Miyachi, Kishimoto, and Mashiko as applied to claim 1, and therefore claims 4 and 13 are allowable at least for the same reasons as claim 1 is allowable.

Claim 6 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Miyachi in view of Kishimoto, and further in view of United States Patent No. 6,414,733 to Ishikawa et al. (hereinafter Ishikawa). Applicants respectfully traverse.

The addition of Ishikawa fails to cure the critical deficiency discussed above in regard to Miyachi, Kishimoto, and Mashiko as applied to claim 1, and therefore claim 6 is allowable at least for the same reasons as claim 1 is allowable.

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Claims 7-9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Miyachi in view of Kishimoto and Ishikawa, and further in view of United States Patent No. 5,739,888 to Ogura (hereinafter Ogura). Applicants respectfully traverse.

The addition of Ogura fails to cure the critical deficiency discussed above in regard to Miyachi, Kishimoto, and Mashiko as applied to claim 1, and therefore claims 7-9 are allowable at least for the same reasons as claim 1 is allowable.

Claim 11 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Miyachi in view of Kishimoto and Ishikawa, and further in view of United States Patent No. 6,067,144 to Murouchi (hereinafter Murouchi).

The addition of Murouchi fails to cure the critical deficiency discussed above in regard to Miyachi, Kishimoto, and Mashiko as applied to claim 1, and therefore claim 11 is allowable at least for the same reasons as claim 1 is allowable.

New claims 20 and 21 depend from claim 1 and are therefore are allowable for at least the same reasons as claim 1 is allowable.

New claims 22 and 23 depend from claim 15 and are therefore are allowable for at least the same reasons as claim 15 is allowable.

New claim 24 relates to a liquid crystal display panel that includes, *inter alia*, a reservoir integrally formed between the substrate structures and adapted to accept a part of the liquid crystal from between the pair of substrate structures to prevent increasing the gap. It is respectfully submitted that, as discussed above in regard to claim 1, none of the cited references disclose or suggest this feature, and therefore for at least this reason new claim 24 is allowable.

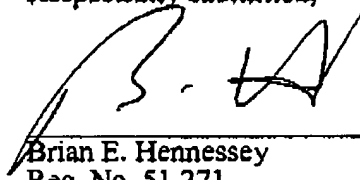
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CONCLUSION

In view of the remarks set forth above, this application is believed to be in condition for allowance which action is respectfully requested. However, if for any reason the Examiner should consider this application not to be in condition for allowance, the Examiner is respectfully requested to telephone the undersigned attorney at the number listed below prior to issuing a further Action.

Any fee due with this paper may be charged to Deposit Account No. 50-1290.

Respectfully submitted,



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